



### Ever ready

Astronaut John Blaha will soon begin his tour of duty on the Russian Mir Space Station. Story on Page 3.



### Well wishes

JSC workers prepare to present a poster to Shannon Lucid signed by guests at JSC's Open House. Photo on Page 4.

# Space News Roundup

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No. 36

## Lopez-Alegria takes on new role in Russia

Astronaut Michael Lopez-Alegria will replace Wendy Lawrence as NASA's director of operations, Russia, at the Gagarin Cosmonaut Training Center in Star City, outside Moscow.

In this rotation assignment, Lopez-Alegria will be the primary link between NASA and Russian management in Star City, coordinating all training and other operations involving NASA or contractor personnel. He will build upon the operational and personal relationships developed over the past two years between NASA, Star City management, American astronauts and Russian cosmonauts.

"Commander Lopez-Alegria will be an excellent asset to this international operation," said Frank Culbertson, shuttle/Mir program director. "His experience and leadership expertise will continue to build on the outstanding job Commander Lawrence has done for us in Star City."



Lopez-Alegria

Lopez-Alegria will leave for Russia in early October and will join fellow U.S. astronauts who are training for future stays aboard the Russian Mir Space Station and the International Space Station. Lawrence and Astronaut David Wolf will join Jerry Linenger, Michael Foale and James Voss, who are already training in Star City.

Selected as an astronaut in March 1992, Lopez-Alegria served as a mission specialist and flight engineer aboard *Columbia* on STS-73, the second United States Microgravity Laboratory mission.

The mission focused on materials science, biotechnology, combustion science, the physics of fluids and numerous scientific experiments housed in the pressurized Spacelab module. Lopez-Alegria served as the flight engineer during the ascent and entry phases of flight, and was responsible for all operations of the "blue" shift on orbit.



NASA Photo

In the white room of the Orbiter Access Arm, the STS-79 crew takes a break from dress rehearsal activities. Standing from left are, Mission Specialist Tom Akers, Commander Bill Readdy and Pilot Terry Wilcutt. Kneeling from left are, Mission Specialists Carl Walz, John Blaha and Jay Apt. The six astronauts are expected to lift off from Kennedy Space Center next week and link up to the Russian Mir Space Station on flight day three.

## Hurricane track to allow Monday launch of STS-79

With a watchful eye on Hurricane Hortense in the Caribbean, engineers continue routine close out procedures to ready *Atlantis* for Monday's launch on STS-79.

The new launch time of 3:54 a.m. CDT Monday for *Atlantis* was set last Thursday after Hurricane Fran's pass through the *Atlantic* sent the orbiter back into the Vehicle Assembly Bldg. for the second time and then back out to Launch Pad 39A hours later as the danger of severe weather in the Kennedy Space Center area had passed.

Back on the pad, ordnance installation and connection operations were delayed briefly by lightning on Monday at KSC but the work was completed by Tuesday. The EVA space suits have been installed and checked out in *Atlantis*' airlock and aft engine compartment close outs for flight were scheduled for completion Thursday. Installation of the equipment in the double Spacehab module in the payload bay also has been completed.

The STS-79 flight crew, including Commander Bill Readdy, Pilot Terry Wilcutt, and Mission Specialists Jay Apt, Tom Akers, Carl Walz and John Blaha, was scheduled to arrive at KSC by T-38 before dawn today. The mission countdown was to have begun at T-43 hours at the same time as the crew arrival.

Monday's launch date will set *Atlantis* up for rendezvous and docking for a fourth time with the Russian Mir Space Station at 10:17 p.m. CDT on Wednesday. Once docked, the STS-79 crew will transfer the largest amount of logistics—including food, clothing, experiment supplies and space equipment for Mir—ever shipped to the Russian station aboard an American shuttle. In addition, Blaha will settle into his new home on Mir as U.S. Astronaut Shannon Lucid packs her things on *Atlantis* for her return trip

to Earth after more than six months on the Russian outpost. Blaha will spend four months in space on Mir conducting a variety of experiments. He will come home during STS-81 in January.

While docked, the STS-79 and Mir 22 crews will conduct a variety of experiments in the Spacehab module. The science module, nestled in *Atlantis*' cargo bay, has been expanded for STS-79 so that more experiments can be performed during docked operations.

In-cabin payloads on STS-79 include the IMAX camera, and the Shuttle Amateur Radio Experiment, which the astronauts and cosmonauts will use to talk to school children around the world as well as other amateur radio operators. In addition, *Atlantis* carries the first powered experiments to transfer to Mir.

*Atlantis* will remain docked to Russia's space station for five days, with undocking set for 8:31 p.m. on Sept. 23. Landing of *Atlantis* is targeted for about 7:12 a.m. Sept. 26 at KSC.

Meanwhile, the stacking of the solid rocket boosters for *Columbia*'s launch on STS-80 began Monday and will take approximately two weeks to complete. Preparations for final checks of the main propulsion system and rudder speed brake are in work and installation of the main engine heat shield continues. *Columbia* is tentatively set for launch Oct. 31.

The STS-80 crew, Commander Ken Cockrell, Pilot Kent Rominger, and Mission Specialists Tammy Jernigan, Tom Jones and Story Musgrave, will spend 16 days in orbit to deploy and retrieve the ORFEUS-SPAS astronomy satellite and deploy and retrieve the Wake Shield Facility. In addition, two space walks are scheduled to test assembly techniques for construction of the International Space Station.



## Goldin praises Lucid

By Natasha Calder

As Cosmonaut Researcher Shannon Lucid neared the end of her six months of scientific research last week, NASA Administrator Daniel S. Goldin called to congratulate her on her record-setting female flight.

"This is really an incredible achievement," Goldin said. "We are proud of you because of who you are and what you've accomplished and the strength you've shown in adversity."

"On a long duration flight, the type of things we're going to see on the International Space Station, there are going to be many things that are going to happen, and there are going to be difficulties," Goldin said.

"Your enthusiasm and the way you have been able to take small setbacks in stride inspires everyone here down on Earth."

Elena Kondakova, the Russian Cosmonaut who, prior to Saturday, held the record for the length of time a female has spent in space on a single flight, also congratulated Lucid on her record last Friday.

"I will be happy for Shannon Lucid that she will stay in space for a longer time," Kondakova said. "It proves that women can work in space as long as men."

Lucid's flight has been a training experience for all of those who support and will support such long duration missions, including NASA's

Please see **BLAHA**, Page 4



## Hurricane season builds during fall

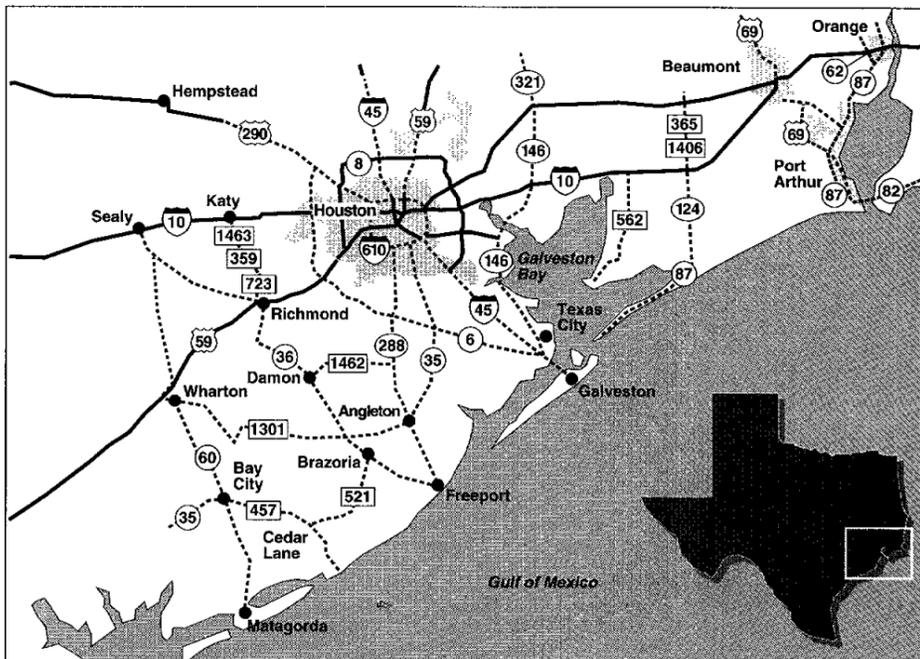
By Bob Gaffney

With hurricane season about half over, weather forecasters have begun to see a great deal of tropical activity and employees may want to check their emergency supplies and evacuation procedures.

"The recent reports on damaging wind, rain and flooding resulting from Hurricane Fran are a strong reminder of why it is important to prepare early and stay prepared," said Hurricane Plan Manager Keith McQuary. The hurricane season does not end until Nov. 30.

One of the items always of concern to JSC area residents is evacuation, should it become necessary. "Evacuation routes in the Clear Lake and Galveston areas are virtually unchanged since Alicia struck in 1983," McQuary said. What has changed since a hurricane struck the Houston area is the size of some residential areas. The residential expansion results in areas with double, or possibly, triple the number of

Please see **EMERGENCY**, Page 4



There are several evacuation routes out of the Houston area. Hurricane Plan Manager Keith McQuary suggests employees keep this map close at hand during the next few weeks as hurricane season peaks.

## Emergency Numbers

Emergency 911  
 Harris County Flood Control 713-881-3100 (river levels)  
 National Weather Service 713-337-7895  
 Texas Highway Department 1-800-452-9292 (road closures)

### Emergency Management Offices

American Red Cross	
Galveston County	409-945-7200
Harris County	713-526-0636
Baytown	713-420-6558
Clear Lake Shores	713-334-1034
Deer Park	713-478-7298
Dickinson	713-337-2489 x240
El Lago	713-326-1951
Friendswood	713-996-3335
Galveston	409-766-2102
Galveston County	409-948-2581 x102
Harris County	713-881-3100
Hitchcock	409-986-5559
Houston	713-754-0600
Kemah	713-334-5414
LaMarque	409-938-9269
League City	713-332-0440
Nassau Bay	713-333-4200
Pasadena	713-475-5588
Santa Fe	409-925-2000
Seabrook	713-474-4471
Taylor Lake Village	713-326-2843
Texas City	409-948-2525
Webster	713-332-1826

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# Ticket Window

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday. For more information, call x35350 or x30990.

**Astroworld NASA Night:** Astroworld will have a NASA night from 6 p.m.-midnight Sept. 27. Tickets cost \$14.02.

**Race Park NASA Night:** Sept. 20 will be employee night at Sam Houston Race Park. Tickets cost \$1.

**Entertainment '97 books:** Cost is \$25.

**EAA Belize Resort Trip:** Available Sept. 1-Dec. 15, \$472 double occupancy, \$100 deposit required, final payment due 30 days before departure.

**EAA Caribbean Getaway Cruise to Puerto Rico:** Jan. 3-13, \$1198 double occupancy with airfare, \$999 cruise only, deposit due by Sept. 5, final payment due Nov. 4.

**Sam Houston Race Park Track Pack:** \$10 value pack for \$5.25, includes Club Level seating, program, tip sheet, admission, preferred parking and gift shop discount.

**Splashdown:** One day pass cost \$14.25.

**Schlitterbahn:** One day pass cost \$19.75 for adults, \$16.95 for children.

**Astroworld:** One day pass cost \$22.75, two day pass cost \$34.25.

**Fiesta Texas:** One day pass cost \$22.75, two day pass cost \$34.25.

**Six Flags at Arlington:** One day pass cost \$22.75, two day pass cost \$34.25.

**Sea World:** Adult tickets cost \$24.50, children (3-11) cost \$17.25.

**Space Center Houston:** Discount tickets, adult, \$8.75; children (4-11), \$6.25, annual membership, \$22.95, family membership, \$59.95.

**Movie discounts:** General Cinema, \$4.75; AMC Theater, \$4.50; Sony Loew's Theater, \$4.75.

Stamps: Book of 20, \$6.40.

**Metro tickets:** Passes, books and single tickets available.

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# Gilruth Center News

**EAA badges:** Dependents and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday; and 8 a.m.-4 p.m. Saturdays. Cost is \$5. Dependents must be between 16 and 23 years old.

**Nutrition intervention program:** A six-week program helps you learn more about the role diet and nutrition play in your health, including lectures, private consultations with a dietitian and blood analysis. Program is open to all employees, contractors and spouses. For more information call Tammie Shaw at x32980.

**Defensive driving:** One-day course is offered once a month. Cost is \$25.

**Stamp club:** Meets at 7 p.m. every second and fourth Monday in Rm. 216.

**Women's self defense:** Martial Arts training for women only from 5-6 p.m. Tuesdays and Wednesdays. Cost is \$35 a month.

**Weight safety:** Required courses for employees wishing to use the weight room is offered from 8-9:30 p.m. Sept. 24. Pre-registration is required. Cost is \$5.

**Exercise:** Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays.

**Aikido:** Martial arts class meets from 6:15-7:15 p.m. Tuesday and Wednesday. Cost is \$35 per month. New classes begin the first of each month.

**Aerobics:** Classes meet every Monday, Tuesday and Thursday.

**Ballroom dancing:** Cost is \$60 per couple. For additional information call the Gilruth Center at x33345.

**Country and Western dancing:** Beginner class meets 7-8:30 p.m. Monday. Advance class meets 8:30-10 p.m. Monday. Cost is \$20 per couple.

**Fitness program:** Health Related Fitness Program includes a medical examination screening and a 12-week individually prescribed exercise program. For more information call Larry Wier at x30301.

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# Swap Shop

## Property

Sale: Canyon Lake, vaulted ceilings, FPL, 1200 deck storage under house, 12x12 gazebo, waterfall, 1800 sq ft, \$124k. 210-899-3447 or 520-1777.

Lease: El Lago, 3-2-2, 1900 sq ft, FPL, 1 yr lease, no pets, \$950 mo. 474-3473.

Sale: Alvin, 10 acres, cleared, fenced, barn, located on CR 172, \$48.9k. x30737.

Sale: Heritage Park, 3-2-2, brick 2-story home, by owner, below appraised value, \$77.5k. 482-8845.

Sale: League City, 3-2-2D, brick, both formal, lg family room, no MUD taxes, newly painted, ~2100 sq ft, \$80k by owner. 480-6275 or 554-5261.

Sale: El Dorado Trace condo, 2-1, W/D, security sys, covered parking, storage room, 2nd story, \$29k. 286-7014.

Sale/Trade: Heavy wooded lot, 5 acre, Sam Rayburn Lake; 2 camper lots at Lake Livingston. Dave Ayoub, 280-2014.

Rent: Friendswood/Clear Lake area, 3-2-2, brick, high ceilings, FPL, gas, \$625 mo + \$625 dep. 333-4743 or 922-5447.

Rent: Clear Lake, Piper's Meadow, 2-2-2 split floor plan, quiet neighborhood, \$750 mo. 244-1971 or 338-1506.

Lease: 3-1-5-2, brick, League City, lg fenced backyard, \$550 mo + dep. Ken Jenks, x34368 or 280-0802, Keith Brown, x38952.

Lease: Baywind I condo, 2BDR, upstairs, balcony, W/D conn, \$540 mo + dep. 996-5055.

Lease: Clear Lake, Oakbrook on golf course, fenced, 4-2.5, ceiling fans, clean, \$1150 mo. Jack Cohen, 488-3171.

Sale/Lease Purchase: Brook Forest, 4-2-2, 2348 sq ft, new carpet/tile, remodeled kitchen, middle atrium open to outside. Brian, 480-4351.

Rent: Galveston condo, furnished, sleeps 6, Seawall Blvd & 61st ST, cable TV, wknd/wkly/dly rates. Magdi Yassa, 333-4760 or 486-0788.

Rent: Beach house, Crystal Beach, TX, sleeps 10, furn, cable TV, wkly/wknd rates, 486-1888.

Rent: Lake Travis cabin, CA/H, fully equipped, sleeps 8, \$550 wkly/\$120 dly. 474-4922.

## Cars & Trucks

'88 Mazda 323SE, 5 spd, 4 dr, good cond, \$2.2k obo. 333-2751.

'88 Honda Civic hatchback, new motor/tires/battery, A/C, AM/FM/cass, \$3.7k obo. Dan, 474-7101.

'93 Dodge conversion van, 63k mi, \$11.9k. 280-6119 or 486-9657.

'87 Ford PU Stepside, 86k mi, ex cond, cold A/C, new tires, \$3590. x30737.

'85 Oldsmobile Cutlass, air, new tires, \$600 obo. Steve, 280-1219 or 334-1618.

'81 Olds station wagon, cold air, pwr, auto, new tires, 124k mi, \$2.5k. Hal, x33856 or 332-6507.

'93 Chevy Sierra C-1500, ext cab, long bed w/liner, 350 V8, P/S and P/B, tilt, cruise, A/C, maroon, nice truck. Les, x30090 or 331-5951.

'89 Honda Civic, 4 dr sedan, white w/black trim, blue interior, manual, A/C, very clean, by owner, \$2.8k obo. x35597 or 554-5156.

'89 Pontiac Sunbird, 4 dr, auto, A/C, ex cond, new tires, \$2595. Ayub Khan, x39199.

'54 Street Rod Chevy truck on '79 Chevy chassis w/454-Cam, Headman headers, custom inter, \$4.5k. 409-938-7328.

'94 Jeep Cherokee Country, 4 WD, A/C, AM/FM/

cass, alarm, black, 64k mi, ex cond. Joe, 767-5584 or 480-8916.

'77 Tioga class C RV, 24', new tires/brakes, extensive tune-up, new carpet/drapes, \$5.5k. Karen, x38784 or 291-9100.

'50 Chevrolet 3/4 ton truck, \$2.2k. 286-5971.

'95 GMC Sierra Sportside PU, white, V6, auto, A/C, radio/cass, mags wheels/rails/running boards, 31.5k mi, \$13k. 421-6288 or 458-1740.

'92 Honda Civic SI, red, 2 dr hatchback, 5 spd, 1.6L fuel inj, sunroof, stereo cass, \$7.5k. 486-8487.

'90 Mustang convertible GT, auto, 1 owner, low mileage, \$9.5k. 334-3066.

'93 Ford Aerostar van, ex cond, loaded, low miles, \$11.5k. 283-9356 or 930-8278.

'87 Bronco II, good cond, auto, A/C, AM/FM/cass, luggage rack, 1 owner, \$4.4k. 332-6941.

'78 Buick Riviera, Buick's 75th anniv car, silver/black w/leather inter, 403 cu in. V8, \$800. x35180 or 326-3706.

'85 Mazda RX-7 GSL, ex cond, white/red leather, pwr, must sell, \$2.5k obo. Collene, 480-5430.

'93 Toyota Corolla, white, A/C, manual w/O/D, \$8.2k nego. Bail, 333-6489.

'93 T-Bird, ex cond, 32k mi, garaged, pwr access, leather, alarm, \$12.9k obo. 332-3779 or 282-3382.

'79 Ford F-150 Super cab, dependable, A/C, 460, auto, 8' bed w/toolbox, & rack, good tires, \$1195. 409-925-7939.

'90 Ford Festiva, AM/FM/cass, new tires, tinted, A/C, 56k mi, ex cond, reliable, \$2.5k. 331-2748.

'86 Pontiac Fiero, parting out, windows/body panels, bumpers, etc, good cond. Keith, x35191 or 996-8318.

'82 Oldsmobile Delta 88, 4 dr, 307 ci, clean, dependable, \$1.5k obo. Tom, 643-2104.

'90 Toyota Xtracab SR5 4x4, 5 spd, ex cond, loaded + cap, \$11.5k. 333-6892 or 482-8224.

'92 Pontiac Bonneville SSE, white w/grey leather, loaded, \$14k. 333-7761 or 482-8224.

## Boats & Planes

Avon inflatable 1993 2.85, 9'3", rollaway, w/'89 Johnson 8 Hp outboard, ex cond. 332-2319.

'84 Seamy Border, 21', 260 Hp Mercruiser, V8, Alpha I OD, SS prop in '96, full swim platform, Pioneer stereo sys, bimini top, full cov, tandem galv trailer, ex cond, \$8.5k. Keith, x35191 or 996-8318.

'14' Jon boat semi-V w/9.5 Johnson OB & trailer, good cond, \$900. Richard, 332-5923.

'78 Honda Hawk, very low miles, best offer. x33948.

'86 Honda XR100R, new chain/sprockets/gas tank, runs well, \$650 obo. x35597 or 554-5156.

'96 Harley Davidson, Hog, "Sportster Hugger", blue, 845k mi, includes \$2k xtra chrome, windshield. 244-1791 or 488-1326.

Schwinn Highplains mt bike, 23" frame; 26" wheel kick stand, Jelly seat, ex cond, \$180. Walt, x36353.

## Audio Visual & Computers

Pentiums 100/120/133 MHz, 16 Mb, 1.6 Gig HD, 6x CD multimedia, 14" 28 SVGA monitor, FD, kybd, \$1095/1225/1350. Ayub Khan, x39199.

Kodak CD ROM Writer, \$1.5k obo; Sony VCR 8mm format w/timer recording, on-screen display & editing cap, needs minor work, \$175; portable HD

JSC

# Dates & Data

## Today

**Astronomers meet:** The JSC Astronomical Society will meet at 7:30 p.m. Sept. 13 at the Lunar & Planetary Institute, 3600 Bay Area Blvd. For more information, call Chuck Shaw at x35416.

**Cafeteria menu:** Special: tuna noodle casserole. Total Health: baked potato. Entrees: steamed salmon steak, baked chicken, fried cod fish, ham steak. Soup: seafood gumbo. Vegetables: French cut green beans, cauliflower with cheese, green peas, black-eyed peas.

## Monday

**Cafeteria menu:** Special: breaded cutlet. Total Health: crispy baked chicken. Entrees: stir fry pork and rice, baked chicken, smoked sausage with German potato salad, French dip sandwich. Soup: cream of broccoli. Vegetables: okra and tomatoes, peas, navy beans, baby carrots.

## Tuesday

**Cafeteria menu:** Special: fried chicken. Total Health: vegetable lasagna. Entrees: Salisbury steak, steamed pollock, vegetable lasagna, French dip sandwich. Soup: split pea and ham. Vegetables: mixed vegetables, French cut green beans, pinto beans, vegetable sticks.

## Wednesday

**Toastmasters meet:** The SpaceLand Toastmasters will meet at 7 a.m. Sept. 18 at the House of Prayer Lutheran Church. For more information call Jeannette Kirinich x45752.

**Astronomy seminar:** The JSC Astronomy Seminar will meet at noon Sept. 18 in Bldg. 31, Rm. 129. An open discussion meeting is planned. For more information call Al Jackson at x35037.

**Scuba club meets:** The Lunarfans will meet at 7:30 p.m. Sept. 18 at Redfish Restaurant under the Kemah/Seabrook Bridge, Seabrook Side. For more information call Fred Toole at x33201.

**Cafeteria menu:** Special: stuffed bell pepper. Total Health: baked potato. Entrees: stir fry chicken & rice, wieners & beans, fried fish, western special, beef, chicken sausage, Reuben sandwich. Soup: seafood gumbo. Vegetables: buttered rice, Italian green beans, corn O'Brien, peas and carrots.

## Thursday

**SFE directors meet:** The Space Family Education board of directors will meet at 11:30 a.m. Sept. 19 in Bldg. 45 Rm. 712D. For more information on this open meeting call Gretchen Thomas at x37664.

**TSPE meets:** The Bayou Chapter of the Texas Society of Professional Engineers will meet at 7 p.m. Sept. 19 in the Paradise Reef Restaurant, South Shore Harbour Resort and Conference Center. TSPE Executive Director Gerhardt Schulle Jr. will speak. For more information, contact John Welch, 474-2654.

**Cafeteria menu:** Special: barbecue smoked link. Total Health: roasted turkey breast. Entrees: turkey and dressing, beef stroganoff, steamed pollock, French dip sandwich. Soup: tomato Florentine. Vegetables: Spanish rice, lima beans, buttered squash, oriental vegetables.

## Friday

**Reservations due:** Registration is due Sept. 20 for the Performance Management Association luncheon workshop on the Implementation of an Earned Value Management System to be held at 11:15 a.m. Sept. 26 at the Ramada Inn on NASA Road 1. The discussion will

focus on "Data Accumulation, Analysis and Reporting." Cost is \$13 and includes lunch. For details call Susan Widmer at x34299.

**Cafeteria menu:** Special: meat sauce and spaghetti. Total Health: baked potato. Entrees: rainbow trout, liver and onions, beef cannelloni, ham steak, fried cod fish, Reuben sandwich. Soup: seafood gumbo. Vegetables: steamed broccoli, breaded okra, cut corn, black-eyed peas.

## Sept. 26

**Radio club meets:** The JSC Amateur Radio Club will meet at noon Sept. 26 in Bldg. 16, Rm. 253. The meeting will include officer elections. For more information call Larry Dietrich x39198.

## Oct. 1

**ABWA meets:** The American Business Women's Association, Clear Lake Area Chapter will meet at 5:30 p.m. Oct. 1 at Bay Oaks Country Club. For more information call Nancy Hutchins at x34006.

## Oct. 3

**Warning system test:** The site-wide Employee Warning System will under go its monthly audio test at noon Oct. 3. For more information call Bob Gaffney at x34249.

## Oct. 6

**Walktoberbest:** The American Diabetes Association is sponsoring its annual Walktoberbest on Oct. 6. This year's walk will be in tribute to the late space reporter Stephen Gauvain. For details contact Jennifer Potter at 977-7706.

## Oct. 8

**BAAC meets:** The Bay Area Aero Club will meet at 7 p.m. Oct. 8 at the Houston Gulf Airport in League City. For more information call Jerry Adair at x38058.

\$115; GE washer and gas dryer, almond, great cond, \$350 obo. x33022 or 992-3522.

Round oak dining room table, 6 chairs; dishwasher. 486-1888.

Bedroom set, full sz, antique green w/dresser, 5 drawers chest and 2 night stands, Italian design, great cond, \$950. Magdi Yassa, x333-4760 or 486-0788.

## Wanted

Want male roommate to share, 3-2-2 house, Clear Lake City, 1 dog allowed, free cable, phone, \$330 mo + 1/2 util. Robert, x36402 or 286-0434.

Want roommate, non-smoking to share 4-2, Friendswood, cable, W/D, all household privileges, \$250 mo all bills pd, no dep. Michael, x38169 or 482-8496.

Want roommate, lg 4-2-2 in Seabrook, separate loft/living area & phone, cable/fax, W/D, \$375 mo. 474-4742.

Want non-smoking roommate to share 3-2-2, Webster, \$340 includes util, except phone, prefer students. 332-8417.

Want professional non-smoking male roommate to share 2-2 townhouse, Pearland, \$350 mo + 1/2 util. John, 997-8796.

Want non-smoking roommate to share, 4-2-5-2, Clear Lake, \$270 mo. 286-5248.

Want male professional, non-smoking to share, \$400 mo incl all util. 474-6359 or 480-1670.

Want non-smoker share 3-2-2 house in League City, kitchen access, garage, no pets, \$310 mo + 1/2 util, \$200 dep. 332-6941.

Want a carpool from Missouri City/Sugar Land area. 488-9788.

Want personnel to join VPSI Vanpool departing Meyerland Park & Ride lot at 7:05 a.m. for JSC. Vanpool consist of on-site personnel working 8 a.m./4:30 p.m. shift. Don Pipkens, x35346.

Want space memorabilia for private collection flown items, e.g. utensils, clothing, autographs on photos, covers, letters-relating to Mercury, Gemini, Apollo, Skylab, Shuttle. Richard or Nancy, 481-8080.

Want easel, white board & carrying case. 488-4640.

Want Shih Tzu puppy, 2-11 mos old, \$100. x47503 or 480-4695.

Want low priced school/work car or truck, prefer Japanese. 271-7011.

Want 8mm/super 8 movie projector. Dennis, x31409.

Want a Ruger#1 rifle, prefer models 1A, 1S or 1V, will consider a trade. Charles, x37678 or 661-4789.

## Miscellaneous

Pentax IQ Zoom 35mm-70mm tele-macro lens, auto film advance, timer, built-in flash, camera case, \$65; Cardio-Rider training sys, ex cond, \$50; GPX Party Machine Sing-A-Long cass recorder Karaoke, \$30. Jana, x47624.

Wedding gown, veil & slip, ivory detailed w/pearls & appliqué, sz 4/8, \$700 all. 334-3998.

White beaded Victorian wedding dress, sz 7, veil, fitted v-back w/round pearls & long bustled train w/coutouts, \$400. Leah, x34544 or 326-3759.

Pre World War I, 22 cal. Remington pump repeating rifle, fine cond, best offer over \$60. J. Dornback, 326-3459.

Aquarium, 10 gal. stand, light, access, \$19; plastic chaise lounge, \$9. Jan, x47029 or 282-0256.

Four Astroworld 1-day passes, \$40. Charlene, x30185.

Lt 325/60R15 mud traction tires and mag type wheels, good cond, 2 for \$175 obo. Steve, 992-7049.

Body By Jake hip and thigh machine, ex cond, w/booklet, \$69. Sheila, 486-7412.

Baby items: 1 car seat, 1 booster seat: 1 high chair, boy baby clothes, some toys. Angie, x34721 or 532-2136.

Mares wetsuit, men's med full-body, back zipper, black w/blue arms and legs, \$100 obo; booties, Decor men's, sz 9, women's sz 7, black, \$20 ea obo; weight bells, neoprene, men's blue, women's green. \$20 ea obo. Jeri, 333-7552.

Two 15 rd factory magazines, fits Taurus PT 92/99, \$50. Barry, x39280 or 996-5739.

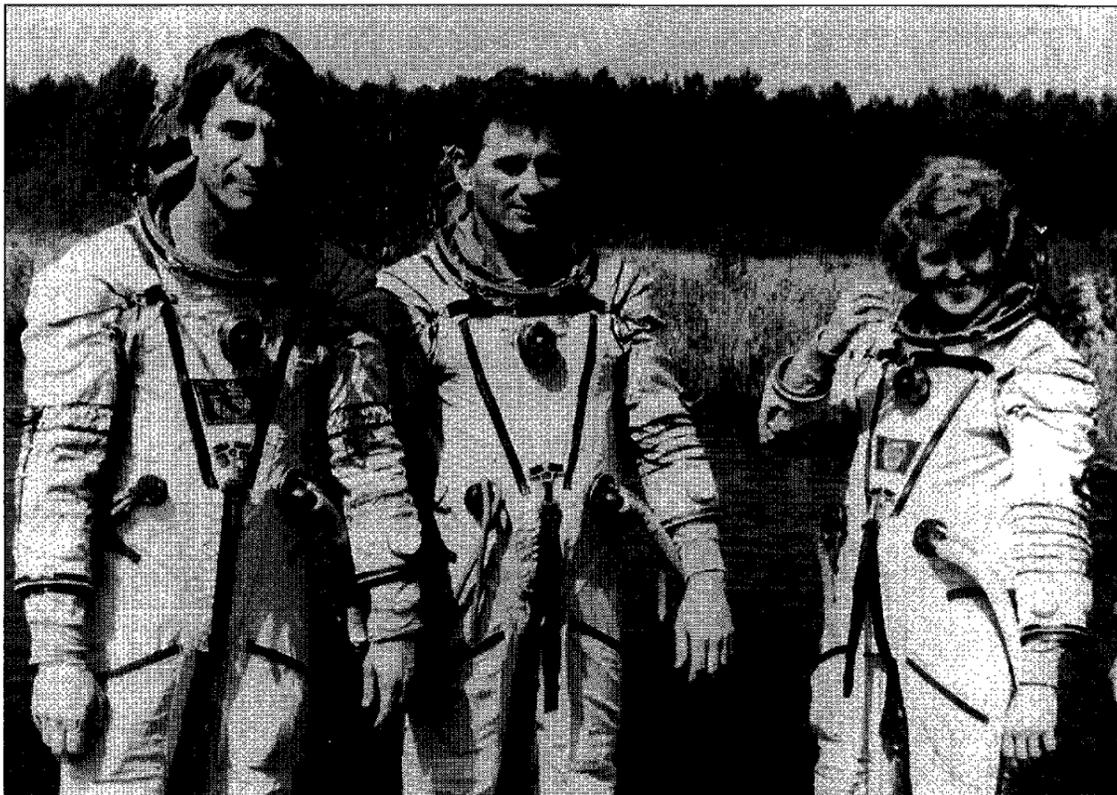
Men's 26", 10 spd, \$30; ladies, 26", 10 spd, \$25; boy's 18", \$35; girl's 14", \$25; boy's scooter, \$20; Fisher Price Tournament table, \$100. Robert, x41058 or 286-4930.

Girl's 20" Malibu bike, pink and purple, \$50. Deborah, x48564 or 333-5581.

Fisher Price Night Time bottle warmer, \$16; child's bicycle seat up to 40 lbs, \$15; boy's name brand clothes, 18 mos-6 yrs, summer/winter; closet organizer, \$14; hard cover books, novels/variety of titles, \$85; Little Tykes picnic table, \$25; Little Tykes Turtle sand box, \$20. x37130.

Cordura carrying case for Mac SE/30, \$35; maple swivel rocker, \$50; Fisher Price car seat, \$25; twin sz sheet set w/transformer design for kids, \$8. 480-3424.

Russian lacquer box, Matryoshka dolls and eggs, all hand painted, priced to sell. 482-5531



Top to bottom, left to right:  
 1) Astronauts John Blaha, left, and Shannon Lucid, right, and Cosmonaut Vasily Tsibiliev take a break from a Soyuz survival training exercise at the Gagarin Cosmonaut Training Center in Star City, Russia. Blaha will replace Lucid on board Mir next week, and Tsibiliev is scheduled to command the Mir-23 mission.  
 2) Blaha joins Russians Pavel Vinogradov and Gennadiy Manakov and French cosmonaut researcher Claudie Andre-Deshays during an indoor training session. Blaha, Vinogradov, Manakov and Andre-Deshays trained to work together on Mir, but a shuttle launch delay and medical problem for Manakov pre-empted their time together on orbit.  
 3) Water from the Black Sea glistens in the hair of Lucid and Blaha after a water survival training session.  
 4) Blaha is helped with his life jacket during the Black Sea exercise.  
 5) Blaha goes over checklists with Mir-23 Commander Tsibiliev and Flight Engineer Alexander Lazutkin during training in Star City.



**‘There’s no better way to contribute to the International Space Station...’**

—Astronaut John Blaha

# ‘Ever’ Ready

## Veteran Astronaut John Blaha hopes four-month stay on Mir will define ‘forever’ on-orbit

By Kyle Herring

**F**ive years ago John Blaha spent a little time in Germany. It was there that he first thought of living on a space station—Russia’s Mir Space Station. Next week, he will climb aboard the space shuttle to begin his fifth mission and a four-month stay on Mir.

Blaha met several cosmonauts and greeted some astronaut friends while in Berlin for a conference of the Association of Space Explorers in October 1991. And though the focus of the meeting was not joining U.S. and Russian space efforts toward one common goal, the subject of using America’s shuttle and Russia’s space station was discussed.

“I remember returning from that conference and thinking to myself, ‘we ought to be doing that right now,’” Blaha said. “From my perspective I started thinking that if I’m ever going to fly on a space station, I’m going to have to fly on the one that’s really up there and not the one that we’re getting ready to build.”

The other more important reason he is flying to Mir, Blaha said, is to gain first-hand experience that he can use to better assist in preparing future International Space Station crew members and managers on the ground.

“To me, flying on a real space station and understanding it from a real operational viewpoint would help me contribute to the space station that we’re getting ready to build and operate for the next 10 to 15 years,” he said.

*Atlantis* is set to launch Sept. 16 for a rendezvous and docking with Mir for the fourth time. Blaha will fly up with STS-79 Commander Bill Readdy, Pilot Terry Wilcutt and Mission Specialists Jay Apt, Carl Walz and Tom Akers. *Atlantis’* crew will come home with Cosmonaut Researcher Shannon Lucid who has been living and conducting experiments on the orbiting complex since March.

Following docking, Blaha, a retired Air Force Colonel, will be reunited with Lucid with whom he trained at the Gagarin Cosmonaut Training Center at Star City outside Moscow for the past year and a half. The two will fly in space together for the third time, having flown on two previous shuttle flights — STS-43 in August 1991 and STS-58 in October 1993.

It will be the first astronaut-for-astronaut crew exchange on Mir to continue the permanent U.S. presence in space.

Close friends, in addition to co-workers, Blaha and Lucid headed to California in 1994 for intense Russian language training and then traveled to Star City in January 1995. Joining Blaha in an apartment at the training complex was his wife, Brenda.

Though the move to Russia was a bit of a culture shock, the Blahas knew what to expect and adapted quickly to life outside Moscow.

“John and I had been here the summer before we came for two weeks and so I knew what it was going to be like before I arrived,” Brenda said. Though there was no such thing as a typical day in Star City, she said she adapted to a lifestyle that included language training twice a week and once a week trips to the American Embassy in

Moscow to do some shopping. On the weekends, she and John would go to the theater, shop and go out to dinner.

“Sometimes I have tea with my Russian friend upstairs and sometimes I go shopping with the German cosmonaut’s wife,” she said, in addition to visiting with the other American wives. The Blahas were visited last Christmas by two of their three children for two weeks.

Blaha describes the American and Russian training techniques as “completely different, but yet the results are equal.” While NASA uses simulator training and repetition to train space flyers, the Russian system, “which has not changed since Yuri Gagarin flew the first space flight,” Blaha said, relies on lectures, classroom training and oral and written tests.

“A completely different philosophy and training system than we have, but again, both are very successful,” he said.



It’s important, Blaha said, for both countries to recognize each other’s traditions when it comes to mission preparations. “Both programs have been successful with very different approaches. Everybody who works on the shuttle/Mir program, followed by the International Space Station program, should recognize those dif-

ferences from the start and not hide the fact that we are miles apart.

“If you’re aware of that you understand why there are so many differences as we try to talk with each other to work out the problems in a common shuttle/Mir program or on an ISS program.”

With training complete, all that remains is the mission for the 54-year-old Blaha. He will join Mir-22 Commander Valery Korzun and Flight Engineer Alexander Kaleri, who launched last month to replace the crew that Lucid has worked with for most of her stay on Mir. He is scheduled to be picked up on *Atlantis’* return mission, STS-81, carrying Jerry Linenger to the station in January.

While looking forward to a trip he first dreamed of five years ago, Blaha doesn’t know as yet what will follow this next mission. He said he has learned from Norman Thagard, the first American to stay on Mir, and several cosmonauts who have had Mir flights, that long-duration missions become a “psychological battle.”

Blaha said the U.S. space program needs to stay in orbit “to get a handle on what it is really like to stay in space that long. It’s an area that I don’t think we have much experience in in our space program, so I think we need to understand that.”

After four shuttle flights, Blaha is ready to do something a little different. “There’s no better way to contribute to the International Space Station than to first really understand what it’s like to be on that type of a mission,” he said.

STS-29, STS-33, STS-43 and STS-58 combined add up to about a month in space. Now Blaha will stay in space for a duration of at least three and a half times that.

“Every shuttle flight I’ve flown, I’ve never wanted to come home on entry day. I really enjoyed being in orbit. I’ve always said I would stay there forever. I think that on this mission I will define what ‘ever’ is.” □

# ISO 9000 sessions to give employees overview

The Human Resources Office and the ISO 9000 Project Office are gearing up to train employees on the interworkings of ISO 9000, beginning with a one-hour awareness seminar next month.

A special overview for managers is now available. Supervisors who missed the Sept. 9 and 10 overview seminars may attend one of two sessions set for 12:30-4:30 p.m. Oct. 7 or Oct. 10 in the Bldg. 30 auditorium. This overview will cover what ISO 9000 is, how ISO 9000 forms the foundation for a strong quality management system, how JSC is implementing ISO 9000 and JSC's timeline.

"It is important as we move forward with the center's ISO 9000 implementation that our management team have a good understanding of what ISO is and what we are trying to accomplish at JSC," said JSC Director George Abbey. "This seminar will provide you with that understanding and allow you to provide effective leadership to ISO activities in your organization."

A short one-hour awareness seminar will be offered to all employees on Oct. 7 and 9. These sessions will give an abbreviated version of the manager's course with further training to be available for individuals direct-

ly involved in the ISO 9000 process.

"These short seminars will help build awareness about what ISO is and the Center's implementation plan," said Glen Van Zandt of the Human Resource Development Branch. "In the weeks following, we'll be providing further training in areas such as auditing and documentation for those that need it."

The training courses follow on the heels of the establishment of the ISO 9000 Project Office. This office—headed by Director Charlie Harlan—brings a top-level focus to the center's effort to become certified to the

ISO 9000 family of standards. The new office will be responsible for managing JSC's transition from the current NASA Quality Management System to the internationally recognized ISO 9000 standards, with third party certification expected in about one year.

Also this week, JSC's director named Lee Norbraten deputy director of the newly established ISO 9000 Project Office.

Questions about the seminars and the upcoming training sessions may be directed to Brent Fontenot at x36456 or Glen Van Zandt at x33069.

## Seddon to support life sciences

By Eileen Hawley

Astronaut Rhea Seddon has been assigned to a part-time post at Vanderbilt University's Center for Space Physiology and Medicine in Nashville, Tenn., effective Sunday.

Seddon will act as a liaison assisting Vanderbilt researchers in evaluating flight equipment and developing experiment operating procedures for NASA's 1998 Neurolab mission. Neurolab will study the adaptation of the nervous system to microgravity during a 16-day flight aboard *Columbia*. Seddon is a three-time shuttle veteran, including two flights dedicated to life science investigations.

"Rhea's medical background and extensive experience gained during her two Spacelab Life Science missions make her uniquely qualified for this position," said David Leestma, director of Flight Crew Operations. "She will be representing the interests of JSC and the astronaut office in designing and developing protocols for this flight."

## Fire prevention activities set

By Rindy Carmichael

Testing home fire detectors is this year's theme for fire prevention week set for Oct. 6-12.

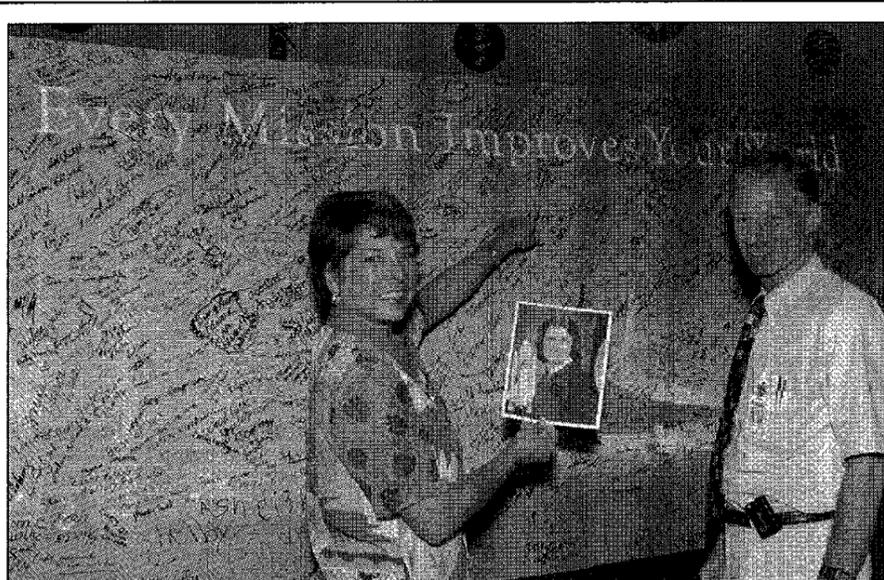
The Health, Safety, and Environmental Compliance Office is sponsoring, "Let's Hear It For Fire Safety—Test Your Detectors," with several activities on site to heighten fire safety awareness among employees.

A coloring contest will be held for employees' children. The Houston Fire Department will judge the contest on Oct. 4 and award first, second and honorable mention ribbons. Winning entries will be posted in the Bldg. 1 lobby during Fire Prevention Week. All entries must be received by the HSEC office no later than Sept. 27.

In addition, the HFD will participate in a drawing to give away 10 smoke detectors. To qualify, contestants must complete a "Fire Safety Word Search" and mail it to Seemore Safety, Mail Code NA3 by the close of business Sept. 30. Winners will be notified Oct. 7.

The word search and coloring contest pages can be picked up at the information tables in Bldgs. 3 and 11 cafeterias, downloaded from the JSC Safety Home Page, or requested by calling x45078.

The National Fire Protection Association suggests buying only smoke detectors that carry the label of an independent testing laboratory. Several types of detectors are available, with some running on batteries and others on household current. Some detect smoke using an "ionization" sensor, others use a "photoelectric" detection system. All approved smoke detectors, regardless of type, will offer adequate protection provided they are installed and maintained properly. A smoke detector should be installed on or near the ceiling outside each sleeping area and on every level of the home, including the basement. For more information contact the Safety Communications Office at x45078.



JSC Photo by Benny Benavides

**WELL WISHES**—From left, Dotty Johnson of Allied Signal Technical Services and Charlie Spencer of the Manned Space Training Division display a 4-by-8 poster signed by the public during JSC Open House. The poster will be presented to Astronaut Shannon Lucid upon her return from a record setting six-month stay on the Russian Mir Space Station.

## AIAA hosts space opportunity program

The American Institute of Aeronautics and Astronautics will host an International Cooperation in Space program beginning at 5:15 p.m. Sept. 26 at the Gilruth Center.

Professor Ernesto Vallerani will discuss the results of a workshop held on international cooperation and the new opportunities available. Topics include criteria for international cooperation, disaster mitigation, low cost access to space and space station utilization.

The workshop, held in May in Frascati, Italy, featured 60 experts from government, industry and academia from around the world and worked to determine political, managerial and the financial process of international cooperation.

Tickets cost \$10 for members and \$11 for nonmembers and include dinner. Reservations are due by noon Sept. 23. For more information contact Pam Sisk at x38341 or Danita Thomas at x32348.

## Blaha ready for first on orbit crew exchange

(Continued from Page 1)

Russian partners, and both Lucid and Goldin took time Saturday to thank and congratulate the ground crews.

"I would like to take this opportunity to thank all the people who have been on the ground and have been working, supporting this flight because, from my viewpoint, I think this flight has gone absolutely wonderful," Lucid said. "We all know that a flight is not just done by the crew that's in orbit. It depends upon the support you get from the ground and I've had fantastic support. We have gained a lot of experience on how to deal with a long flight versus a short flight, which we have so much experience with, and I think we handle it very professionally."

"I'm overwhelmed by the level of professionalism and how people even under the most adverse conditions maintain a very level approach to their business," Goldin said. "And it's more than just the people in America. We have to thank our Russian colleagues;

they're doing a terrific job. We're learning a lot from them, and they're learning from us. And I really appreciate your calling to everyone's attention that it's more than a person, it's teamwork. It's all the NASA people, our contractors, our employees and it's the Russians and the great Russian program."

Only the second American astronaut to fly a long duration mission aboard the Russian space station, Lucid already is benefiting from the improvements made after her predecessor's flight, especially in the area of communication.

"I think that the people down in the control center have done a really great job in trying to make sure I had routine communication with my family," Lucid said.

Lucid's recommendations for how to improve future long-duration space flights and, ultimately, International Space Station flights, related to the type of work done on such missions since current science experiments are designed for shorter duration missions.

"Previously on shuttle flights, we've said that crew time is very valuable, and it is, so you need to design the experiments so they don't involve a lot of crew time. But I think that is the wrong approach to take for a long-duration space flight," she said. "I think the thing that a crew person really enjoys is working with the scientific experiments, and they really enjoy being able to interact with the PIs (principle investigators). I think that as long as we design the experiment so the crew person can make valid observations and help the principle investigator make interpretations, it makes the crew person feel like they're part of the investigative team, and I think that's very important for long duration space flight."

Goldin informed Lucid that work is under way to create a two-way video system for the International Space Station which will allow for greater communication between the station and the ground to better achieve this goal.

Lucid's flight aboard Mir will end

next week when STS-79 arrives with her replacement—Astronaut John Blaha—on Wednesday. During the Terminal Countdown Demonstration Test, Blaha said he was excited to be a part of a mission that will be the first to conduct a crew exchange on orbit.

"I think what we are about to do here is pretty exciting. We are really into the space station era right now and I personally think that is fantastic," Blaha said. "A crew exchange in orbit, when you think about it, is incredible, and this is the first crew that is going to do that. I think everybody in our country also is proud because this space program continues to move forward and discover new ground."

STS-79 also will bring with it a new supply of nitrogen unexpectedly needed aboard Mir, indicating the growing maturity of the joint U.S., Russian partnership by once again demonstrating its ability to improvise, collaborate and react quickly to handle space station issues.

## Emergency info sources available

(Continued from Page 1)

occupants around Clear Lake.

"Severe gridlock may await those who delay too long to evacuate," McQuary said. Employees living in the Clear Lake area should be prepared to evacuate when local officials announce their recommendation to do so. If area residents wait until after Galveston Island starts evacuating, it could be too late.

"So don't wait to evacuate," McQuary said. "Gas up the car,

gather necessary supplies to sustain your family after you return, and leave early. Local municipalities and the Red Cross do not open local shelters before a major hurricane, so don't depend on them."

A list of helpful local telephone numbers is included in this edition of the Space News Roundup for employees to keep. McQuary also recommends employees monitor local news stations for current weather and traffic conditions.

Employee information also is available through radio bulletins, commercial television and the Office of Public Affairs Employee Information Service at x36765 and JSC Emergency Information Line at x33351. Employees with Internet access can check Houston traffic conditions at <http://traffic.tamu.edu/traffic.html>. Hurricane awareness and emergency information also will be available through the JSC Home Page in the near future.

## Aviation seminar set for Thursday

The Aircraft Operations Division is hosting an Aviation Maintenance Technician Seminar from 8 a.m.-5 p.m. Thursday at Ellington Field.

Speakers from the Houston Flight Standards District Office will conduct a seminar that will comply with the requirements of the Inspection Authorization in accordance with the Federal Aviation Regulation. All NASA, Dyncorp Maintenance, engineering and management personnel who are interested in aviation maintenance are invited to attend.

The seminar will begin with a discussion on "Igniter Plug Problems," by Steve Staudt of Champion Plugs. Mike Bryant of Airman's Aviation will discuss Federal Aviation Regulation 91-General Operating Rules followed by Attorney Darrell Green's discussion on FAA Enforcement Actions. After lunch, Jerry Runions from Gulfstream Aircraft Corp. will discuss Gulfstream II Aircraft Service News and Ken Reiley of the Flight Standards District Office in Dallas will talk about Unauthorized Parts. Mid-afternoon, Steve Balco of Falcon Crest Accessories will discuss Starter and Generators, followed by Dave Hewitt and Malcom Pallock of Rolls Royce discussion on Spey Engines. To wrap up the afternoon Gordon McMahon of the Flight Standards District Office in Houston will discuss Form 337 Refresher and Flight Standards District Office Familiarization. For more information call Nickie Duncan at 244-9683.

## NMA to meet this month

The NASA JSC, United Space Alliance, Lockheed-Martin, and Bay Area Community Chapters of the National Management Association are hosting a joint meeting at 5 p.m. Sept. 25 at the Gilruth Center.

Don Clark, a Federal Bureau of Investigation agent, will discuss "FBI and Teamwork." Employees may contact their NMA Chapter boosters for reservations. For more information call Christina Ford at 282-3521.

## Space News Roundup

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